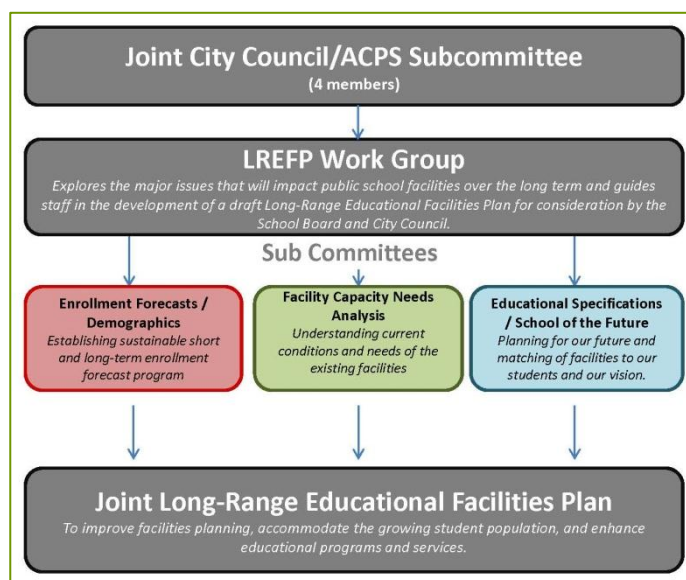


**AGENDA**  
**Facility Capacity Needs Analysis Subcommittee Meeting**  
**of the Long-Range Educational Facilities Plan Work Group**  
**City Hall, Chet & Sabra Avery Conference Room 2000**  
**Monday, February 10, 2014, 6:00pm**

1. Welcome and Introductions *Staff and Committee Members*
2. Review Work Program *Staff*
3. Progress by Hughes Group Architects *Staff*
  - a) Package #1: Samuel Tucker, James K. Polk, Lyles-Crouch, Charles Barrett
  - b) Site visits completed: T.C. Minnie Howard, Cora Kelly, Matthew Maury, George Mason, John Adams
  - c) Sites remaining: George Washington, Douglas MacArthur, William Ramsay, Mt. Vernon, Francis C. Hammond, T.C. Williams King Street
4. Capacity Discussion *Staff and Committee Members*
  - a) Physical
  - b) Programmatic
  - c) Core
  - d) Level of Service
5. Group Discussion/Next Steps



### **Why is this important?**

Important both for the design of the facility and to enrollment the right number of students in each building.

### **Variables**

- Building size
- Number/types of teaching stations
- Support facilities
- Staffing
- Specialty program offerings
- Class sizes
- Schedules

### **Physical (Design, Building) Capacity**

This term refers to how many students a school building can accommodate with a traditional instructional program. Building capacity is calculated by multiplying the number of full-size classrooms in the building by the number of students a classroom is designed to accommodate. General parameters typically defined at state or county level. Can be further developed based upon local educational specifications.

Pros: Numbers do not change unless class size policies are altered or a capacity project is completed.

Cons: Does not consider any programming limitations so capacity appears greater than actual utilization. Assumes 100% utilization throughout the day.

### **Program Capacity**

Program capacity defines the capacity of a school based upon the specific educational programs that are provided at a particular school site. Program capacity is calculated by multiplying the target class size by the number of full size classrooms remaining after space is provided to special education programs, ELL programs, TAG programs, art, music, and physical education programs.

Pros: Capacity is consistent with utilization

Cons: Programs are constantly changing so capacity is a moving target

### **Core Facilities**

Core spaces typically include cafeteria, serving area, kitchen, gymnasium, multipurpose room, library/media center. Calculated based on a square foot allowance per student.

**Utilization Factor**

Education specification specialists recommend the use of a utilization factor in determining school capacity. The utilization factor is a percentage applied to the optimum capacity to account for the uneven distribution of students across grade levels and cohort groups. The recommended rate for elementary schools is 90-100%. The recommended rate for middle school is 70-85% and high school is 80-85%.

**Level of Service**

Goal for acceptable level of service provided by a facility based on the operational characteristics of the facility.

**Other**

- Square footage per student
- Gross square feet of permanent facilities
- Calculate square feet per student and compare to a recommended standard

**Hybrid/Combination**

Uses a combination of factors including core capacity and building or program capacity. Provides a more realistic capacity calculation than others. Can use a variety of methods to reflect existing conditions.

\*\*Capacity numbers are not fixed.

### Capacity Example:

#### Instructional Classrooms-

4 Pre-Kindergarten  
6 Kindergarten  
4 1st Grade  
3 2nd Grade  
3 3rd Grade  
1 full size special education

#### Core Spaces-

1 media center 2,000 SF  
1 gymnasium 4,000SF  
1 cafeteria 5,000 SF (357-625 students)  
1 art  
1 music

Classrooms	Type	ACPS Class size Cap	Design Capacity	Total Program Capacity
10	Early Childhood	22	220	220
7	1 <sup>st</sup> & 2 <sup>nd</sup>	24	168	168
7	3 <sup>rd</sup>	26	182	182
1	Special Ed.	10	10	10
1	Art	26	26	
1	Music	26	26	
1	PE			
<b>Total Stations</b>			<b>632</b>	<b>580</b>

\*specialty classrooms (music and art) are not available to permanently house additional full-time students

Level of Service	85%	90%	100%	110%	120%
Design Capacity	538	569	632	696	759
Program Capacity	493	522	580	638	696

Capacity	Enrollment 2 years ago	Enrollment 1 year ago	Enrollment this year	Proj. Enroll.
	400	420	440	460
<b>Building</b>	500/632= 79%	520/632= 82%	540/632= 85%	560/632= 87%
<b>Program</b>	500/580= 86%	520/580= 90%	540/580= 93%	560/580= 97%